

WHAT IS CLAIMED IS:

1. A method of measuring a material in which the material is conveyed by a conveying unit and dropped from a discharge portion of the conveying unit to be supplied into a measuring unit arranged under the discharge portion, and is measured by the measuring unit, the method comprising:

a first supplying step of supplying the material from the discharge portion into the measuring unit until the quantity of the material measured by the measuring unit reaches a preparatory measuring target value that is relatively small compared to a final measuring target-value of the material; and

a second supplying step of receiving a portion of the material to be supplied through the discharge portion into the measuring unit on a path where the material is dropping for recovery, whereby the material is supplied through the discharge portion into the measuring unit at a supplying rate that is smaller than that in the first supplying step; wherein

the material is stopped from being supplied through the discharge portion into the measuring unit when the quantity of the material measured by the measuring unit reaches the final measuring target-value.

2. The method according to claim 1, wherein the material comprises electronic chip components.

3. The method according to claim 1, wherein the material is conveyed in the first supplying step by vibrating the material.

4. The method according to claim 1, wherein during the first supplying step, the measuring unit measures the weight of the material to determine whether the quantity of the material has reached the preparatory measuring target value.

5. The method according to claim 1, wherein during the first supplying step, a stocking hopper is located in a non-receiving position, and when the quantity of material measured by the measuring unit reaches the preparatory measuring target value, the the stocking hopper is moved to a receiving position.

6. A measuring apparatus comprising:  
a conveying unit having a conveying member for conveying material to be measured, and a discharge portion from which the material conveyed by the conveying member is discharged;

a measuring unit for measuring the material dropped from the discharge portion and supplied therein;

a stocking mechanism arranged between the discharge portion and the measuring unit, the stocking mechanism being controlled so that an off-state and an on-state of the stocking mechanism are changed over to each other, the off-state being such that the stocking mechanism recedes from a path along which the material drops so that the dropping of the material is not disturbed, the on-state being such that the stocking mechanism advances into the path along which the material drops so that a portion of the material can be received for recovery;

a controller adapted to capture measurement data obtained in the measuring unit and to control the stocking mechanism based on the data; wherein

the controller controls the stocking mechanism to be set in the off-state until the quantity of the material measured by the measuring unit reaches a preparatory measuring target value that is smaller than a final measuring target-value of the material; and

the controller controls the stocking mechanism to be set in the on-state after the quantity of the material measured by the measuring unit reaches the preparatory measuring target value, and the controller stops the material from being supplied to the measuring unit through the discharge portion when the quantity of the material measured by the measuring unit reaches the final measuring target value.

7. The measuring apparatus according to claim 6, wherein the material comprises electronic chip components.
8. The measuring apparatus according to claim 6, wherein the conveying unit vibrates the material for conveying the material to the discharge portion.
9. The measuring apparatus according to claim 6, wherein the measuring unit measures the weight of the material to determine whether the quantity of the material has reached the preparatory measuring target value.
10. The measuring apparatus according to claim 6, wherein the measuring unit includes an electronic measuring device and a metering container for measuring the weight of the material.
11. The measuring apparatus according to claim 6, wherein the stocking mechanism includes a stocking hopper and a driver for moving the stocking hopper from a non-receiving posture in which the stocking hopper is in a lower position to a receiving posture in which the hopper is in an upper position.
12. The measuring apparatus according to claim 11, wherein when the stocking hopper is in the lower position, all of the material discharged from the conveying unit is supplied into a metering container of the measuring unit.
13. The measuring apparatus according to claim 11, wherein when the stocking hopper is in the upper position, most of the material discharged from the conveying unit is received into a stocking hopper of the stocking mechanism.

14. The measuring apparatus according to claim 6, wherein the controller includes a microcomputer and is arranged to receive measurement data from the measuring unit.

15. The measuring apparatus according to claim 6, wherein the controller includes a microcomputer, a data memory and a program memory, wherein data relating to the final measuring target value and the preparatory measuring target value are stored in the data memory and data for operating the controller are stored in the program memory.